

AMENDMENTS IN THE CLAIMS

Please cancel Claims 1-12.

Please enter new Claims 27-55.

SUB G1 27. A composition comprising a fatty acid-acylated insulin and zinc.

SUB G2 28. A composition comprising an aqueous solution of a fatty acid-acylated insulin and zinc.

SUB G1 29. The composition of Claim 28, further comprising from about 0.2 mole to about 0.7 mole of zinc per mole of fatty acid-acylated insulin.

30. The composition of Claim 29, wherein the pH is 6.8 to 7.8.

SUB G2 31. The composition of Claim 30, further comprising a phenolic compound at a concentration of from 0.5 mg to 5 mg of per milliliter of the aqueous solution.

SUB G4 32. The composition of Claim 31, wherein the fatty acid-acylated insulin is N-acylated Lys<sup>B29</sup> human insulin.

SUB G3 33. The composition of Claim 32, wherein the fatty acid-acylated insulin is N-palmitoyl Lys<sup>B29</sup> human insulin, and wherein the solution is comprised of from about 0.3 mole to about 0.55 mole of zinc per mole of fatty acid-acylated insulin.

34. The composition of Claim 33, wherein the concentration of phenolic compound is from about 2.5 mg to about 5.0 mg per milliliter of the aqueous solution.

35. The composition of Claim 34, wherein the phenolic compound is selected from the group consisting of phenol, m-cresol, p-cresol, o-cresol, methylparaben, and mixtures thereof.

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36. The composition of Claim 33, wherein the zinc is added to the solution as a water soluble zinc salt selected from the group consisting of zinc chloride and zinc acetate.

37. The composition of Claim 36, wherein the phenolic preservative is selected from the group consisting of phenol and m-cresol.

38. The formulation of Claim 31, further comprising a normal insulin.

39. The formulation of Claim 38, wherein the mole ratio of acylated insulin to normal insulin is in the range of 30:1 to 1:3.

40. The formulation of Claim 31, further comprising an insulin analog.

41. The formulation of Claim 40, wherein the mole ratio of acylated insulin to insulin analog is in the range of 30:1 to 1:3.

42. A composition comprising a fatty acid-acylated insulin analog and zinc.

43. A composition comprising an aqueous solution of a fatty acid-acylated insulin analog and zinc.

44. The composition of Claim 43, further comprising from about 0.2 mole to about 0.7 mole of zinc per mole of fatty acid-acylated insulin analog.

45. The composition of Claim 44, wherein the pH is 6.8 to 7.8.

46. The composition of Claim 45, further comprising a phenolic compound at a concentration of from 0.5 mg to 5 mg of per milliliter of the aqueous solution.

47. The composition of Claim 46, wherein the fatty acid-acylated insulin analog is N<sup>ε</sup>-acylated at lysine, and

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wherein the amino acid residue at position B30 of the fatty acid-acylated insulin analog is Thr, Ala, or deleted.

48. The composition of Claim 47, wherein the concentration of phenolic compound is from about 2.5 mg to about 5.0 mg per milliliter of the aqueous solution.

49. The composition of Claim 48, wherein the phenolic compound is selected from the group consisting of phenol, m-cresol, p-cresol, o-cresol, methylparaben, and mixtures thereof.

50. The composition of Claim 49, wherein the zinc is added to the solution as a water soluble zinc salt selected from the group consisting of zinc chloride and zinc acetate.

51. The composition of Claim 46, wherein the phenolic preservative is selected from the group consisting of phenol and m-cresol.

B1  
cont  
52. The formulation of Claim 46, further comprising a normal insulin.

53. The formulation of Claim 52, wherein the mole ratio of acylated insulin analog to normal insulin is in the range of 30:1 to 1:3.

54. The formulation of Claim 46, further comprising an insulin analog.

55. The formulation of Claim 54, wherein the mole ratio of acylated insulin analog to insulin analog is in the range of 30:1 to 1:3.

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Please amend Claim 25:

B2  
25. (Amended) A storage stable acylated insulin formulation comprising a lyophilized powder of said acylated insulin [fortified with] and zinc in an amount of 0.2 to 0.7 mole zinc per mole of said acylated insulin.

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